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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,667	06/19/2001	Andre Luiz Arias	33764R003	7582

441 7590 04/21/2004

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WASHINGTON, DC 20036

EXAMINER

THORNTON, YVETTE C

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/787,667	ARIAS ET AL.	
	Examiner	Art Unit	
	Yvette C. Thornton	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/31/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 19 and 27-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19 and 27-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is written in reference to application number 09787667 filed on June 19, 2001, which is a 371 of PCT/BR99/00079 filed on September 21, 1999.

Response to Amendment

1. Claims 1-18 and 20-26 have been cancelled. Claims 19 and 27-39 are currently pending.
2. The indicated allowability of claims 19 and 27-39 is withdrawn in view of the newly discovered reference(s) to Lazarus (US 4943511 A). Rejections based on the newly cited reference(s) follow.

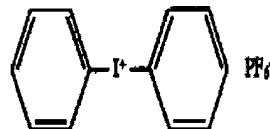
Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 19 and 27-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya et al. (US 5786125 A) in view of Lazarus et al. (US 4943511). Tsuchiya exemplifies in examples 1-5 the preparation of a positive light sensitive lithographic printing plate. The substrate is an aluminum plate, which has been textured and anodized (c. 22, l. 65-c. 23, l. 7). The said plate is coated with a coating solution and dried to form a primer layer (c. 23, l. 8-11). A light sensitive layer is then coated on the primer layer and dried to a weight of 2 g/m². The light sensitive layer comprises (1) a carbon black dispersion; (2)

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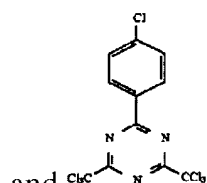
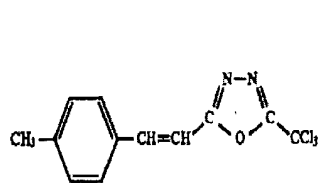
bisphenol A-formaldehyde resol resin; (3) m-cresol-formaldehyde novolak resin; (4) an acid precursor; (5) a surfactant and (6) a solvent (c. 23, l. 26-c. 24, l 20). Example 1 exemplifies



the use of an acid precursor (III-2) having the structure

(c. 8, l. 55;

Table 1). Examples 3 and 5 used acid precursor (I-2) and (II-2) which have the structures:



and Clc1ccc(cc1)/N=C/C(=N/C(=O)C(Cl)(Cl)Cl)/N respectively. It is the examiner's position that the

use of bisphenol A-formaldehyde resol resin and m-cresol-formaldehyde novolak resin meets the limitations of the claimed dual polymer binder system wherein bisphenol A-formaldehyde resol resin is the second polymer which is the product of bisphenol A and an aldehyde and m-cresol-formaldehyde novolak resin is the first polymer which is the product of m-cresol and an aldehyde. It is the examiner's position that compound (III-2) meets the limitations of the claimed iodonium salt having a hexafluorophosphate anion. Specifically, compound (III-2) is diphenyliodonium hexafluorophosphate as set forth in instant claim 34. Compounds (I-2) and (II-2) meet the limitations of a dye derived from the oxazoyl class as set forth in instant claim 30.

5. Example 1 further teaches applying a silicon rubber layer over the said light sensitive layer and laminating with a stretched polypropylene film to obtain a light sensitive lithographic printing plate. The resulting plate was exposed with a YAG laser; the laminated film was pressed off; the plate was heated and then developed.

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6. Tsuchiya lacks explicit details pertaining to the molecular weight of the taught resol and novolak resins. However since the resins fall within the scope of the claimed polymers one of ordinary skill in the art would expect that the molecular weights would fall within the broad range of instant claim 28.

7. Tsuchiya also fails to explicitly teach a composition comprising the specific composition of instant claims 38 and 39. Tsuchiya however does teach that the weight ratio of the resol resin to the novolak resin used is 10/90 to 95/5 (c. 3, l. 23-24). The infrared absorber can be added in an amount of 0.01 to 50% by weight and preferably 0.1-20% by weight based on the total solid content of the light sensitive layer composition (c. 3, l. 55-58). The acid precursors are added in the amount of 0.001 to 40% by weight, preferably 0.1 to 20% by weight (c. 17, l. 16-22). The taught ranges clearly encompass those claimed by the applicant. Although Tsuchiya fails to exemplify a composition within the claimed ranges, one of ordinary skill in the art would have motivated by the teaching of Tsuchiya to use any amount within the taught range to make a light sensitive composition which requires no fountain solution for direct plate making (c. 1, l. 5-12).

8. Tsuchiya teaches all the limitations of the instant claims except it fails to teach a curing step after development. Lazarus et al. (US 4943511) exemplifies a process wherein a positive working system was developed and then post-baked in an air circulating oven at about 150° C for 30 minutes to increase the adhesion and chemical resistance of the undissolved portions of the coatings (c. 14, l. 8-11). It is the examiner's position that Lazarus discloses what is well known and conventional in the art of photolithography. One of ordinary skill in the art would have been motivated by what is well-known and

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conventional in the art, as exemplified by Lazarus, to post-bake the developed system of Tsuchiya in order to increase the adhesion and chemical resistance of the undissolved portions of the coatings.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvette C. Thornton whose telephone number is 571-272-1336. The examiner can normally be reached on Monday-Thursday 8-6:30.

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F. Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yvette Clarke Thornton
Patent Examiner
Art Unit 1752

yct
April 18, 2004